AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-6 (cancelled)

7. (new) A device (1) for determination of the angular position (α) of a rotating body (2) relative to a support (4), said device comprising:

- a generator (6) of magnetic flux (32) connected to the rotating body and taking the form of a ring or a portion of a ring and comprising alternating poles (10, 12) making up a series of magnets generating magnetic fluxes (32) in substantially parallel directions (30),
- a magnetoresistive sensor (8) connected to the support (4),

characterized in that the magnetic flux generator (6) is cut from a strip (14) consisting of a series of lines (16) of a constant width (l) extending in the same direction (18) and constituting said poles.

8. (new) The device as claimed in claim 7, characterized in that the width (l) of the lines is less than 5 millimeters.

9. (new) The device as claimed in claim 7, characterized in that the magnetic flux generator (6) comprises at least 10 alternating poles (10, 12).

10. (new) The device as claimed in claim 7, characterized in that the magnetic flux generator (6) takes the form of a portion of a ring extending over at least 120 degrees.

11. (new) The device as claimed in claim 7, characterized in that the magnetoresistive sensor (8) comprises two magnetoresistive elements (20, 22) offset angularly by 45° and a microcontroller (24) determining the angular position of the rotating body (2) from the electrical signals (26, 28) transmitted by said magnetoresistive elements.

12. (new) The device as claimed in claim 8, characterized in that the magnetic flux generator (6) comprises at least 10 alternating poles (10, 12).

13. (new) The device as claimed in claim 9, characterized in that the magnetic flux generator (6) takes the form of a portion of a ring extending over at least 120 degrees.

14. (new) The device as claimed in claim 9, characterized in that the magnetoresistive sensor (8) comprises two magnetoresistive elements (20, 22) offset angularly by 45° and a microcontroller (24) determining the angular position of the rotating body (2) from the electrical signals (26, 28) transmitted by said magnetoresistive elements.

15. (new) The device as claimed in claim 10, characterized in that the magnetoresistive sensor (8) comprises two magnetoresistive elements (20, 22) offset angularly by 45° and a microcontroller (24) determining the angular position of the rotating body (2) from the electrical signals (26, 28) transmitted by said magnetoresistive elements.